

Bulletin 7 of the Cornell Experiment Station.³ His conclusions as to the relative influence of constant and variable temperature on sprouting seem to us invalid on account of his apparent failure to take account of the limits of temperature for the germination of the various species of seeds used. His conclusions are essentially those of Köppen (1870), and are open to the same objections. They are contradicted by those of Pedersen⁴ who found that when the temperature variations were confined to certain limits the growth seemed to be greater rather than less. His further experiments, however, showed that the temperature variations *as such* exercised no influence.

The most remarkable results are those regarding the influence of the amount of moisture on sprouting. A much larger percentage of seed germinated when the soil was kept drier than usual in greenhouses. In some cases the difference amounted to nearly fifty per cent. The best results were obtained when the soil was kept merely moist.

The other results regarding the influence of soaking before planting, soil, color, latitude, etc., are unimportant. The conclusions as to influence of weight and light accord with those of other earlier observers. Perhaps the most important feature of the bulletin is the insistence of the author upon the inadequacy both of limited testing and field planting to determine the quality of seeds, points that his researches abundantly confirm.

OPEN LETTERS.

Some Nebraska grasses.

Nebraska furnishes a new locality for two grasses which are attributed to the far southwest. *Melica Porteri* Scrib., credited from Colorado to Arizona, was collected in 1887 at Weeping Water, about thirty-five miles east of here, and within fifteen miles of the Missouri river. The second and more interesting find is *Eragrostis pilifera* Scheele, at Valentine, just west of the 100th meridian and at the extreme northern border of the state. Vasey's catalogue says it belongs down in Texas and Arizona. What is it doing way up here? *E. pilifera* seems more like either *Molinia* or *Catabrosa* than *Eragrostis*. The spikelets are 2-4 flowered. In a three-flowered spikelet, the lower flower is hermaphrodite, the second male, and the third sterile, with sometimes a pedicel projecting beyond it. If *E. pilifera* is to be considered as a true *Eragrostis*, *Molinia* should also be made a section of that genus.—JARED G. SMITH, *Lincoln, Neb.*

³ BAILEY, L. H.—On the influence of certain conditions upon the sprouting of seeds. pp. 31-71, figs. 7. Ithaca, the University, July, 1889.

⁴ Arbeiten bot. Inst. Würzburg, i. 563.